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APPLICATION NO.	FILING DÂTE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO:	CONFIRMATION NO.	
09/887,653	06/22/2001	James E. Fox	018760.23	. 7190	
21878	7590 10/16/2003		EXAMINER		
KENNEDY COVINGTON LOBDELL & HICKMAN, LLP 214 N. TRYON STREET			FAISON, VE	FAISON, VERONICA F	
HEARST TOWER, 47TH FLOOR CHARLOTTE, NC 28202		ART UNIT	PAPER NUMBER		
		1755			

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		9				
	Application No.	Applicant(s)				
	09/887,653	FOX ET AL.				
Office Action Summary	Examiner	Art Unit				
	Veronica F. Faison	1755				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 28 J	<u>uly 2003</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.					
3) Since this application is in condition for allowal closed in accordance with the practice under a Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120	antionity under 25 U.S.C. \$ 440/a	.) (d) or (f)				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic	c priority under 35 U.S.C. § 119(	e) (to a provisional application).				
<ul> <li>a)  The translation of the foreign language pro</li> <li>15) Acknowledgment is made of a claim for domesting</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6	5) Notice of Informal (	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
S. Patent and Trademark Office						

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Thakkar (US Patent 5,512,089).

Thakkar teaches an ink jet ink composition comprising a liquid vehicle, a pigment and a base (abstract and col. 2 lines 30-35). The reference further teaches that polypropylene glycol has a molecular weight of 425 and a surfactant such as Surfynol TGE (col. 3 lines 10-15). See examples 1-2 and claims 1-17. The composition as taught by Thakkar appears to anticipate the claimed invention.

Claims 1-6, 19 and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by EP 1 114 850.

EP 1 114 850 teaches an ink composition comprising a colorant, glycerin, a glycol compound and water (abstract and page 3 lines 9-10). The colorant is a pigment that has been rendered dispersible and/or dissolved in water without a surfactant or a dispersant (page 3 lines 14-16). The glycol compound is present in the amount of 1 to 30 percent by weight and has a molecular weight is about 130 to 3,000 such as polypropylene glycol (page 4 line 54-page 5 line 36). Water is the main solvent in the

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ink composition however addition solvents such as 2-pyrrolidone may be present and the ink further comprise pH adjustors, antioxidants and ultraviolet absorbers, preservatives and antimold (page 5 line 40-page 6 line 33). See Example W2, Comparative Example W3 and W4, Example Y3. The composition as taught by EP 1 114 850 appears to anticipate the claimed invention.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakkar (US Patent 5,512,089).

Thakkar is described above, but fails to specifically exemplify the claimed ratio of pigment to polypropylene glycol of at least 1:1 to about 1:2.5 as claimed by applicant.

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However, it would have been obvious to one of ordinary skill in the art to use the specific ratio of pigment to polypropylene glycol as claimed by applicant as Thakkar also discloses the use of pigment and polypropylene glycol in overlapping ranges but shows no example incorporating them in the claimed ratio.

Claims 8-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 114 850.

EP 1 114 850 is described above, but fails to specifically exemplify the claimed ratio of pigment to polypropylene glycol of at least 1:1 to about 1:2.5 as claimed by applicant.

However, it would have been obvious to one of ordinary skill in the art to use the specific ratio of pigment to polypropylene glycol as claimed by applicant as EP 1 114 850 also discloses the use of pigment and polypropylene glycol in overlapping ranges but shows no example incorporating them in the claimed ratio.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (US Patent 4,395,287).

Kobayashi et al teach a liquid recording material comprising a recording agent and a liquid vehicle for dissolving or dispersing said recording agent and in that a polyalkylene glycol having an average molecular weight of 150 to 350 and polyalkylene glycol having an average weight of 400 to 750 (abstract and col. 3 line 64-col. 4 line 39). The reference further teaches that water and alkyl alcohol may be present in the liquid (col. 4 lines 34-66). The composition may comprise various dyes and pigments (col. 5 lines 44-45).

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Kobayashi et al fail to specifically exemplify the use polypropylene glycol and pigment as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the specific polypropylene glycol and pigment as claimed by applicant as Kobayashi et al also discloses the use of polypropylene glycol and pigment also discloses the use of pigment and polypropylene glycol in overlapping ranges but shows no example incorporating them in the claimed ratio.

#### Conclusion

The remaining references listed on form 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Supervisory Patent Examiner
Technology Center 1700

Veronica F. Faison